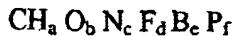


**IN THE CLAIMS:**

Please amend the claims as follows:

1. (Original) A thin-film magnetic head having an MR head portion containing magnetoresistive elements, wherein a protective film having the composition represented by the following formula:

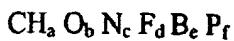


(where  $a = 0 - 0.7$ ,  $b = 0 - 1$ ,  $c = 0 - 1$ ,  $d = 0 - 1$ ,  $e = 0 - 1$ , and  $f = 0 - 1$ , in terms of atomic ratio), and having a thickness of 40 Å or less, is formed on at least the surface of said MR head portion facing a recording medium.

2. (Original) The magnetic head according to Claim 1, wherein the thickness of said protective film is 10 - 30 Å.

3. (Currently Amended) The magnetic head according to Claim 1 or 2, wherein  $a = 0.05 - 0.7$ .

4. (Currently Amended) A method for producing a thin-film magnetic head, wherein comprising conducting vapor deposition is conducted on at least the a surface of said thin-film magnetic head facing a recording medium until a film having a thickness of 40 Å or less is formed, by using material gas that is adjusted so as to form a diamond-like protective film having the composition represented by the following formula:



(where  $a = 0 - 0.7$ ,  $b = 0 - 1$ ,  $c = 0 - 1$ ,  $d = 0 - 1$ ,  $e = 0 - 1$  and  $f = 0 - 1$ ).

5. (Original) The method according to Claim 4, wherein vapor-phase etching is conducted prior to the formation of the diamond-like protective film on the surface of the thin-film magnetic head.

6. The method according to Claim 4 or 5, wherein vapor deposition is conducted by applying a negative bias voltage to the thin-film magnetic head.

7. (Currently Amended) The method according to ~~any one of Claims~~ Claim 4 to 6, wherein the thickness of said protective film is 10 - 30 Å.

8. (Currently Amended) The method according to ~~any one of Claims~~ Claim 4 to 7, wherein  $a = 0.05 - 0.7$ .

9. (Original) A magnetic disk device having at least one slider equipped with the thin-film magnetic head according to Claim 1.

10. (New) The magnetic head according to Claim 2, wherein  $a = 0.05 - 0.7$ .